Sample Gas Conditioning You Can Trust

JH3EX Heated Sample Line









Heated Sample Lines

Sample Gas Coolers

Condensate Treatment

Accessories

Gas Conditioning Systems

Sample Gas
Converters

APPLICATION

- · Extractive gas analysis
- · Emission and process monitoring
- Installation in zone 1, 2 or 21, 22
- Transport of sample gas from sample point to analysis system
- · Remains steadly/safely above acid dew point
- Protection against measured value falsification and frost
- · Indoor and outdoor use

BENEFITS

- · No condensate formation, no freezing
- · Resilient external protection
- · Excellent insulation
- · Optimal heat deployment
- · Customer specific executions
- Long lifetime
- · Kink protection

FEATURES

- Operating temperature regulated up to 180 °C
- Antistatic external jacket of corrugated polyamide PA12
- · Heat insulation with thermo fleece
- 2 x Ex-Pt100 temperature sensors
- · Ready to use
- Second core for e.g. calibration gas as option
- · Inner core reinforced with stainless steel braid

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TECHNICAL DATA

Model JH3EX

Description	cription ATEX approved regulated heated sample line (requires temperature controller)				
External jacket	corrugated polyamide 12 jacket, black, anti-static				
Sample gas core	fixed, interchangeable on request				
Area of application	mobile and fixed installation indoor and outdoor				
OPERATION					
Operating temperature max. 180 °C					
Operating pressure at 180 °C	atmospheric option pressure hose: - PFTE / PFA core: DN 4/6 mm 4 bara; DN 6/8 mm 3 bara; DN 8/10 mm 2 bara, 1/4" OD 5 bara, 3/8" OD 4 bara - SS316 core, all diameters: 10 bara				
Ambient temperature*	−40 °C to +50 °C				
CONSTRUCTION					
Material inner core	PTFE, PFA, SS316				
Heating element	ATEX certified spiraled line heater				
Temperature sensors**	nperature sensors** 2x ATEX certified Ex-PT100, 3-wire				
Thermal insulation multi-layered thermo fleece					
End configuration	silicone caps (see table below), sample gas core 100 mm protruded				
Maximum sample line length* (for one heating circuit)	115 V: DN 4/6 and 6/8 mm – 11 m, DN 8/10 mm – 10 m 230 V: DN 4/6 and 6/8 mm – 25 m, DN 8/10 mm – 22 m 400 V: DN 6/8 mm – 40 m, DN 8/10 mm – 36 m (only for sample gas core 6/8 mm or bigger)				
Diameter sample line outside	63 mm				
Minimum bending radius	300 mm				
Dimensions of silicone caps	L = 110 mm, Ø 69 mm or 61 mm with taper at probe side				
Type of protection	 № II 2G Ex 60079-30-1 eb IIC T3 - T6 Gb № II 2D Ex 60079-30-1 tb IIIC T200°C - T85°C Db IP65 				
Protection class	Electric components: IP65 Mechanic components: IP54				
Approvals / Sign	CE / ATEX, TRCU on request				
ELECTRICS					
Power supply	115 VAC 50/60 Hz or 230 VAC 50/60 Hz or 400 VAC 50/60 Hz, 2-phase connection				
Power consumption	DN 4/6 mm, DN 6/8 mm: 100 W/m. DN 8/10 mm: 110 W/m				
Connection cable	1.5 m, PTFE-insulated				

^{*} To achieve extended length, JCT offers heated lines with reduced power (W/m) or with a second heating circuit. For lower ambient temperatures versions with higher performance are available. Please consult JCT sales team.

** Temperature sensor position is 1m from electrical connection. It is mandatory to use a suitable controller and limiter. See separate datasheet for more information.

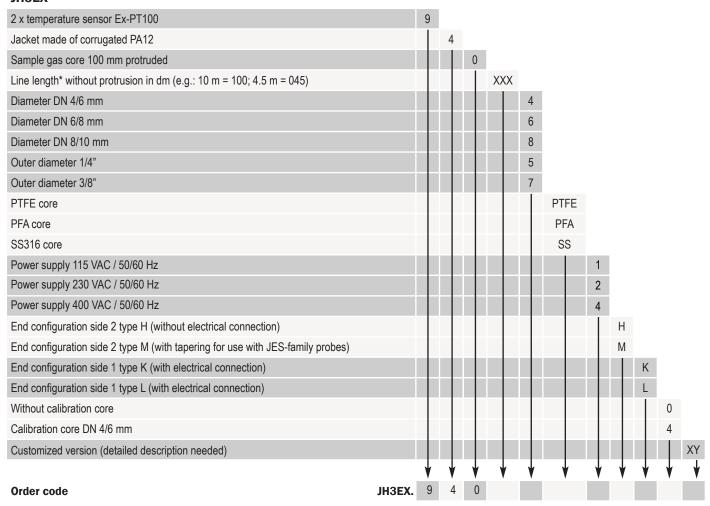
End configuration of sample line

Dimensions in mm

without electrical connection (side 2 – probe side)		with electrical connection (side 1 – cabinet side)		type
Н	9 E		К	silicone cap
М	Tapering at probe side for use with JES-family sample probes. Requires mounting hole for 50 to 61 mm mounting clamp with JES probe.		L	silicone cap

ORDER CODE

JH3EX



Admissible deviations of dimension L₁ for factory mounted heating hoses. The manufacturing tolerances correspond to DIN 20066.

^{*} The specified hose length is determined as follows:

¹⁾ for heated hoses with fittings - the heated hose length including the fittings

²⁾ for heated hoses without fittings - the heated hose length including the end caps. The length of the protruding inside tube is not included.

ORDER CODE

Accessories Part Number Universal mounting clamp for mounting at gas sample probes series JES. 35.00981 Requires mounting hole for 50 to 61 mm mounting clamp with JES probe. Ex-temperature controller up to 16 A with LED indicator, 230 VAC, 50 Hz 89.01000 Ex-temperature controller up to 16 A with display, 230 VAC, 50 Hz 89.01010 Ex-temperature limiter up to 16 A with LED indicator, 230 VAC, 50 Hz 89.01020 Ex-temperature limiter up to 16 A with display, 230 VAC, 50 Hz 89.01030 Handheld controller for 89.01000 & 89.01020 for Ex zone 89.01040









NOx Converter



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